

33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT
SEQUENCE LISTING

<110> KUMAR, Chandrika S.

<120> METHODS AND COMPOSITIONS TARGETING TYROSINE KINASES

<130> 3491/OM582US0

<140> To be assigned

<141> Herewith

<160> 35

<170> PatentIn version 3.2

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<211> 3949

<212> DNA

<213> Homo sapiens

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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Leu Leu Leu Pro Glu Ser Ala Ala Ala Gly Leu Lys Leu Met Gly Ala
35           40           45

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Pro Val Lys Leu Thr Val Ser Gln Gly Gln Pro Val Lys Leu Asn Cys
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Ser Val Glu Gly Met Glu Glu Pro Asp Ile Gln Trp Val Lys Asp Gly
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Ala Val Val Gln Asn Leu Asp Gln Leu Tyr Ile Pro Val Ser Glu Gln
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His Trp Ile Gly Phe Leu Ser Leu Lys Ser Val Glu Arg Ser Asp Ala
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Gly Arg Tyr Trp Cys Gln Val Glu Asp Gly Gly Glu Thr Glu Ile Ser
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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 210 215 220
 Pro Ala Ala Pro Phe Asn Ile Thr Val Thr Lys Leu Ser Ser Ser Asn
 225 230 235 240
 Ala Ser Val Ala Trp Met Pro Gly Ala Asp Gly Arg Ala Leu Leu Gln
 245 250 255
 Ser Cys Thr Val Gln Val Thr Gln Ala Pro Gly Gly Trp Glu Val Leu
 260 265 270
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 275 280 285
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 305 310 315 320
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 325 330 335
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 340 345 350
 Gly Pro Leu Gly Pro Tyr Lys Leu Ser Trp Val Gln Asp Asn Gly Thr
 355 360 365
 Gln Asp Glu Leu Thr Val Glu Gly Thr Arg Ala Asn Leu Thr Gly Trp
 370 375 380
 Asp Pro Gln Lys Asp Leu Ile Val Arg Val Cys Val Ser Asn Ala Val
 385 390 395 400
 Gly Cys Gly Pro Trp Ser Gln Pro Leu Val Val Ser Ser His Asp Arg
 405 410 415
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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Arg Ser Phe Asn Arg Glu Arg Pro Glu Arg Ile Glu Ala Thr Leu Asp
                               485                               490                               495

ser Leu Gly Ile Ser Asp Glu Leu Lys Glu Lys Leu Glu Asp Val Leu
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Ile Pro Glu Gln Gln Phe Thr Leu Gly Arg Met Leu Gly Lys Gly Glu
                               515                               520                               525

Phe Gly Ser Val Arg Glu Ala Gln Leu Lys Gln Glu Asp Gly Ser Phe
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Val Lys Val Ala Val Lys Met Leu Lys Ala Asp Ile Ile Ala Ser Ser
 545                               550                               555                               560

Asp Ile Glu Glu Phe Leu Arg Glu Ala Ala Cys Met Lys Glu Phe Asp
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His Pro His Val Ala Lys Leu Val Gly Val Ser Leu Arg Ser Arg Ala
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Lys Gly Arg Leu Pro Ile Pro Met Val Ile Leu Pro Phe Met Lys His
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Gly Asp Leu His Ala Phe Leu Leu Ala Ser Arg Ile Gly Glu Asn Pro
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Phe Asn Leu Pro Leu Gln Thr Leu Ile Arg Phe Met Val Asp Ile Ala
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Cys Gly Met Glu Tyr Leu Ser Ser Arg Asn Phe Ile His Arg Asp Leu
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Ala Ala Arg Asn Cys Met Leu Ala Glu Asp Met Thr Val Cys Val Ala
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Asp Phe Gly Leu Ser Arg Lys Ile Tyr Ser Gly Asp Tyr Tyr Arg Gln
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Gly Cys Ala Ser Lys Leu Pro Val Lys Trp Leu Ala Leu Glu Ser Leu
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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 740 745 750

Gln Pro Pro Glu Cys Met Glu Asp Val Tyr Asp Leu Met Tyr Gln Cys
 755 760 765

Trp Ser Ala Asp Pro Lys Gln Arg Pro Ser Phe Thr Cys Leu Arg Met
 770 775 780

Glu Leu Glu Asn Ile Leu Gly Gln Leu Ser Val Leu Ser Ala Ser Gln
 785 790 795 800

Asp Pro Leu Tyr Ile Asn Ile Glu Arg Ala Glu Glu Pro Thr Ala Gly
 805 810 815

Gly Ser Leu Glu Leu Pro Gly Arg Asp Gln Pro Tyr Ser Gly Ala Gly
 820 825 830

Asp Gly Ser Gly Met Gly Ala Val Gly Gly Thr Pro Ser Asp Cys Arg
 835 840 845

Tyr Ile Leu Thr Pro Gly Gly Leu Ala Glu Gln Pro Gly Gln Ala Glu
 850 855 860

His Gln Pro Glu Ser Pro Leu Asn Glu Thr Gln Arg Leu Leu Leu Leu
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Gln Gln Gly Leu Leu Pro His Ser Ser Cys
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 <213> Homo sapiens

<400> 3

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

Cys Val Glu Glu Leu Cys Ser Arg Glu Glu Ala Arg Glu Val Phe Glu
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Asn Asp Pro Glu Thr Asp Tyr Phe Tyr Pro Arg Tyr Leu Asp Cys Ile
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Asn Lys Tyr Gly Ser Pro Tyr Thr Lys Asn Ser Gly Phe Ala Thr Cys
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Val Gln Asn Leu Pro Asp Gln Cys Thr Pro Asn Pro Cys Asp Arg Lys
115 120 125

Gly Thr Gln Ala Cys Gln Asp Leu Met Gly Asn Phe Phe Cys Leu Cys
130 135 140

Lys Ala Gly Trp Gly Gly Arg Leu Cys Asp Lys Asp Val Asn Glu Cys
145 150 155 160

Ser Gln Glu Asn Gly Gly Cys Leu Gln Ile Cys His Asn Lys Pro Gly
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Ser Phe His Cys Ser Cys His Ser Gly Phe Glu Leu Ser Ser Asp Gly
180 185 190

Arg Thr Cys Gln Asp Ile Asp Glu Cys Ala Asp Ser Glu Ala Cys Gly
195 200 205

Glu Ala Arg Cys Lys Asn Leu Pro Gly Ser Tyr Ser Cys Leu Cys Asp
210 215 220

Glu Gly Phe Ala Tyr Ser Ser Gln Glu Lys Ala Cys Arg Asp Val Asp
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Glu Cys Leu Gln Gly Arg Cys Glu Gln Val Cys Val Asn Ser Pro Gly
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Ser Tyr Thr Cys His Cys Asp Gly Arg Gly Gly Leu Lys Leu Ser Gln
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Asp Met Asp Thr Cys Glu Asp Ile Leu Pro Cys Val Pro Phe Ser Val
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Ala Lys Ser Val Lys Ser Leu Tyr Leu Gly Arg Met Phe Ser Gly Thr
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT
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Gly Arg Leu Glu Leu Gln Leu Arg Tyr Asn Gly Val Gly Arg Val Thr
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Ser Ser Gly Pro Val Ile Asn His Gly Met Trp Gln Thr Ile Ser Val
 370 375 380

Glu Glu Leu Ala Arg Asn Leu Val Ile Lys Val Asn Arg Asp Ala Val
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Met Lys Ile Ala Val Ala Gly Asp Leu Phe Gln Pro Glu Arg Gly Leu
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Tyr His Leu Asn Leu Thr Val Gly Gly Ile Pro Phe His Glu Lys Asp
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Leu Val Gln Pro Ile Asn Pro Arg Leu Asp Gly Cys Met Arg Ser Trp
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Asn Trp Leu Asn Gly Glu Asp Thr Thr Ile Gln Glu Thr Val Lys Val
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Asn Thr Arg Met Gln Cys Phe Ser Val Thr Glu Arg Gly Ser Phe Tyr
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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```

Ser Gln Val Leu Val Arg Lys Arg Arg Ala Asn Ser Leu Leu Glu Glu
35          40          45

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Thr Lys Gln Gly Asn Leu Glu Arg Glu Cys Ile Glu Glu Leu Cys Asn
50          55          60

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Lys Glu Glu Ala Arg Glu Val Phe Glu Asn Asp Pro Glu Thr Asp Tyr
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Phe Tyr Pro Lys Tyr Leu Val Cys Leu Arg Ser Phe Gln Thr Gly Leu
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Phe Thr Ala Ala Arg Gln Ser Thr Asn Ala Tyr Pro Asp Leu Arg Ser
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Cys Val Asn Ala Ile Pro Asp Gln Cys Ser Pro Leu Pro Cys Asn Glu
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 165 170 175
 Asn Thr Pro Gly Ser Tyr His Cys Ser Cys Lys Asn Gly Phe Val Met
 180 185 190
 Leu Ser Asn Lys Lys Asp Cys Lys Asp Val Asp Glu Cys Ser Leu Lys
 195 200 205
 Pro Ser Ile Cys Gly Thr Ala Val Cys Lys Asn Ile Pro Gly Asp Phe
 210 215 220
 Glu Cys Glu Cys Pro Glu Gly Tyr Arg Tyr Asn Leu Lys Ser Lys Ser
 225 230 235 240
 Cys Glu Asp Ile Asp Glu Cys Ser Glu Asn Met Cys Ala Gln Leu Cys
 245 250 255
 Val Asn Tyr Pro Gly Gly Tyr Thr Cys Tyr Cys Asp Gly Lys Lys Gly
 260 265 270
 Phe Lys Leu Ala Gln Asp Gln Lys Ser Cys Glu Val Val Ser Val Cys
 275 280 285
 Leu Pro Leu Asn Leu Asp Thr Lys Tyr Glu Leu Leu Tyr Leu Ala Glu
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 Gln Phe Ala Gly Val Val Leu Tyr Leu Lys Phe Arg Leu Pro Glu Ile
 305 310 315 320
 Ser Arg Phe Ser Ala Glu Phe Asp Phe Arg Thr Tyr Asp Ser Glu Gly
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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 Cys Ile Arg Ser Trp Asn Leu Met Lys Gln Gly Ala Ser Gly Ile Lys
 450 455 460
 Glu Ile Ile Gln Glu Lys Gln Asn Lys His Cys Leu Val Thr Val Glu
 465 470 475 480
 Lys Gly Ser Tyr Tyr Pro Gly Ser Gly Ile Ala Gln Phe His Ile Asp
 485 490 495
 Tyr Asn Asn Val Ser Ser Ala Glu Gly Trp His Val Asn Val Thr Leu
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 Asn Ile Arg Pro Ser Thr Gly Thr Gly Val Met Leu Ala Leu Val Ser
 515 520 525
 Gly Asn Asn Thr Val Pro Phe Ala Val Ser Leu Val Asp Ser Thr Ser
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 Glu Lys Ser Gln Asp Ile Leu Leu Ser Val Glu Asn Thr Val Ile Tyr
 545 550 555 560
 Arg Ile Gln Ala Leu Ser Leu Cys Ser Asp Gln Gln Ser His Leu Glu
 565 570 575
 Phe Arg Val Asn Arg Asn Asn Leu Glu Leu Ser Thr Pro Leu Lys Ile
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 Glu Thr Ile Ser His Glu Asp Leu Gln Arg Gln Leu Ala Val Leu Asp
 595 600 605
 Lys Ala Met Lys Ala Lys Val Ala Thr Tyr Leu Gly Gly Leu Pro Asp
 610 615 620
 Val Pro Phe Ser Ala Thr Pro Val Asn Ala Phe Tyr Asn Gly Cys Met
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<211> 885
<212> PRT
<213> Homo sapiens

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<400> 31

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```

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Leu Ala Leu Cys Gly Trp Ala Cys Met Ala Pro Arg Gly Thr Gln Ala
20          25          30

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Glu Glu Ser Pro Phe Val Gly Asn Pro Gly Asn Ile Thr Gly Ala Arg
35          40          45

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Gly Leu Thr Gly Thr Leu Arg Cys Gln Leu Gln Val Gln Gly Glu Pro
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Pro Glu Val His Trp Leu Arg Asp Gly Gln Ile Leu Glu Leu Ala Asp

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	100	105	110
Gly Gln Tyr	Gln Cys Leu Val Phe	Leu Gly His Gln Thr	Phe Val Ser
	115	120	125
Gln Pro Gly Tyr Val	Gly Leu Glu Gly Leu Pro	Tyr Phe Leu Glu Glu	
	130	135	140
Pro Glu Asp Arg Thr	Val Ala Ala Asn Thr	Pro Phe Asn Leu Ser	Cys
	145	150	155
Gln Ala Gln Gly	Pro Pro Glu Pro Val	Asp Leu Leu Trp Leu	Gln Asp
	165	170	175
Ala Val Pro Leu	Ala Thr Ala Pro Gly	His Gly Pro Gln Arg	Ser Leu
	180	185	190
His Val Pro Gly	Leu Asn Lys Thr	Ser Ser Phe Ser	Cys Glu Ala His
	195	200	205
Asn Ala Lys Gly	Val Thr Thr Ser	Arg Thr Ala Thr	Ile Thr Val Leu
	210	215	220
Pro Gln Gln Pro	Arg Asn Leu His Leu	Val Ser Arg Gln Pro	Thr Glu
	225	230	235
Leu Glu Val Ala	Trp Thr Pro Gly	Leu Ser Gly Ile Tyr	Pro Leu Thr
	245	250	255
His Cys Thr Leu	Gln Ala Val Leu	Ser Asp Asp Gly Met	Gly Ile Gln
	260	265	270
Ala Gly Glu Pro	Asp Pro Pro Glu	Glu Pro Leu Thr	Ser Gln Ala Ser
	275	280	285
Val Pro Pro His	Gln Leu Arg Leu	Gly Ser Leu His	Pro His Thr Pro
	290	295	300
Tyr His Ile Arg	Val Ala Cys Thr	Ser Ser Gln Gly	Pro Ser Ser Trp
	305	310	315
Thr His Trp Leu	Pro Val Glu Thr	Pro Glu Gly Val	Pro Leu Gly Pro
	325	330	335
Pro Glu Asn Ile	Ser Ala Thr Arg	Asn Gly Ser Gln	Ala Phe Val His

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 370 375 380

Leu Arg Gln Glu Val Thr Leu Glu Leu Gln Gly Asp Gly Ser Val Ser
 385 390 395 400

Asn Leu Thr Val Cys Val Ala Ala Tyr Thr Ala Ala Gly Asp Gly Pro
 405 410 415

Trp Ser Leu Pro Val Pro Leu Glu Ala Trp Arg Pro Val Lys Glu Pro
 420 425 430

Ser Thr Pro Ala Phe Ser Trp Pro Trp Trp Tyr Val Leu Leu Gly Ala
 435 440 445

Val Val Ala Ala Ala Cys Val Leu Ile Leu Ala Leu Phe Leu Val His
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Arg Arg Lys Lys Glu Thr Arg Tyr Gly Glu Val Phe Glu Pro Thr Val
 465 470 475 480

Glu Arg Gly Glu Leu Val Val Arg Tyr Arg Val Arg Lys Ser Tyr Ser
 485 490 495

Arg Arg Thr Thr Glu Ala Thr Leu Asn Ser Leu Gly Ile Ser Glu Glu
 500 505 510

Leu Lys Glu Lys Leu Arg Asp Val Met Val Asp Arg His Lys Val Ala
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Leu Gly Lys Thr Leu Gly Glu Gly Glu Phe Gly Ala Val Met Glu Gly
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Gln Leu Asn Gln Asp Asp Ser Ile Leu Lys Val Ala Val Lys Thr Met
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Lys Ile Ala Ile Cys Thr Arg Ser Glu Leu Glu Asp Phe Leu Ser Glu
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Ala Val Cys Met Lys Glu Phe Asp His Pro Asn Val Met Arg Leu Ile
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Gly Val Cys Phe Gln Gly Ser Glu Arg Glu Ser Phe Pro Ala Pro Val
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Val Ile Leu Pro Phe Met Lys His Gly Asp Leu His Ser Phe Leu Leu

33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

610

615

620

Tyr Ser Arg Leu Gly Asp Gln Pro Val Tyr Leu Pro Thr Gln Met Leu
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Val Lys Phe Met Ala Asp Ile Ala Ser Gly Met Glu Tyr Leu Ser Thr
645 650 655

Lys Arg Phe Ile His Arg Asp Leu Ala Ala Arg Asn Cys Met Leu Asn
660 665 670

Glu Asn Met Ser Val Cys Val Ala Asp Phe Gly Leu Ser Lys Lys Ile
675 680 685

Tyr Asn Gly Asp Tyr Tyr Arg Gln Gly Arg Ile Ala Lys Met Pro Val
690 695 700

Lys Trp Ile Ala Ile Glu Ser Leu Ala Asp Arg Val Tyr Thr Ser Lys
705 710 715 720

Ser Asp Val Trp Ser Phe Gly Val Thr Met Trp Glu Ile Ala Thr Arg
725 730 735

Gly Gln Thr Pro Tyr Pro Gly Val Glu Asn Ser Glu Ile Tyr Asp Tyr
740 745 750

Leu Arg Gln Gly Asn Arg Leu Lys Gln Pro Ala Asp Cys Leu Asp Gly
755 760 765

Leu Tyr Ala Leu Met Ser Arg Cys Trp Glu Leu Asn Pro Gln Asp Arg
770 775 780

Pro Ser Phe Thr Glu Leu Arg Glu Asp Leu Glu Asn Thr Leu Lys Ala
785 790 795 800

Leu Pro Pro Ala Gln Glu Pro Asp Glu Ile Leu Tyr Val Asn Met Asp
805 810 815

Glu Gly Gly Gly Tyr Pro Glu Pro Pro Gly Ala Ala Gly Gly Ala Asp
820 825 830

Pro Pro Thr Gln Pro Asp Pro Lys Asp Ser Cys Ser Cys Leu Thr Ala
835 840 845

Ala Glu Val His Pro Ala Gly Arg Tyr Val Leu Cys Pro Ser Thr Thr
850 855 860

Pro Ser Pro Ala Gln Pro Ala Asp Arg Gly Ser Pro Ala Ala Pro Gly
865 870 875 880

Gln Glu Asp Gly Ala

33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT
885

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<211> 5014
<212> DNA
<213> Homo sapiens

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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<210> 33
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<212> PRT
<213> Homo sapiens

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<400> 33

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          20           25           30

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Glu Glu Ser Pro Phe Val Gly Asn Pro Gly Asn Ile Thr Gly Ala Arg
          35           40           45

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Gly Leu Thr Gly Thr Leu Arg Cys Gln Leu Gln Val Gln Gly Glu Pro
          50           55           60

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Pro Glu Val His Trp Leu Arg Asp Gly Gln Ile Leu Glu Leu Ala Asp
65           70           75           80

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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Ile Val Val Ser Gln Leu Arg Ile Thr Ser Leu Gln Leu Ser Asp Thr
      100                      105                      110

Gly Gln Tyr Gln Cys Leu Val Phe Leu Gly His Gln Thr Phe Val Ser
      115                      120                      125

Gln Pro Gly Tyr Val Gly Leu Glu Gly Leu Pro Tyr Phe Leu Glu Glu
      130                      135                      140

Pro Glu Asp Arg Thr Val Ala Ala Asn Thr Pro Phe Asn Leu Ser Cys
      145                      150                      155                      160

Gln Ala Gln Gly Pro Pro Glu Pro Val Asp Leu Leu Trp Leu Gln Asp
      165                      170                      175

Ala Val Pro Leu Ala Thr Ala Pro Gly His Gly Pro Gln Arg Ser Leu
      180                      185                      190

His Val Pro Gly Leu Asn Lys Thr Ser Ser Phe Ser Cys Glu Ala His
      195                      200                      205

Asn Ala Lys Gly Val Thr Thr Ser Arg Thr Ala Thr Ile Thr Val Leu
      210                      215                      220

Pro Gln Gln Pro Arg Asn Leu His Leu Val Ser Arg Gln Pro Thr Glu
      225                      230                      235                      240

Leu Glu Val Ala Trp Thr Pro Gly Leu Ser Gly Ile Tyr Pro Leu Thr
      245                      250                      255

His Cys Thr Leu Gln Ala Val Leu Ser Asp Asp Gly Met Gly Ile Gln
      260                      265                      270

Ala Gly Glu Pro Asp Pro Pro Glu Glu Pro Leu Thr Ser Gln Ala Ser
      275                      280                      285

Val Pro Pro His Gln Leu Arg Leu Gly Ser Leu His Pro His Thr Pro
      290                      295                      300

Tyr His Ile Arg Val Ala Cys Thr Ser Ser Gln Gly Pro Ser Ser Trp
      305                      310                      315                      320

Thr His Trp Leu Pro Val Glu Thr Pro Glu Gly Val Pro Leu Gly Pro
      325                      330                      335

Pro Glu Asn Ile Ser Ala Thr Arg Asn Gly Ser Gln Ala Phe Val His
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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 370 375 380
 Leu Arg Gln Glu Val Thr Leu Glu Leu Gln Gly Asp Gly Ser Val Ser
 385 390 395 400
 Asn Leu Thr Val Cys Val Ala Ala Tyr Thr Ala Ala Gly Asp Gly Pro
 405 410 415
 Trp Ser Leu Pro Val Pro Leu Glu Ala Trp Arg Pro Gly Gln Ala Gln
 420 425 430
 Pro Val His Gln Leu Val Lys Glu Pro Ser Thr Pro Ala Phe Ser Trp
 435 440 445
 Pro Trp Trp Tyr Val Leu Leu Gly Ala Val Val Ala Ala Ala Cys Val
 450 455 460
 Leu Ile Leu Ala Leu Phe Leu Val His Arg Arg Lys Lys Glu Thr Arg
 465 470 475 480
 Tyr Gly Glu Val Phe Glu Pro Thr Val Glu Arg Gly Glu Leu Val Val
 485 490 495
 Arg Tyr Arg Val Arg Lys Ser Tyr Ser Arg Arg Thr Thr Glu Ala Thr
 500 505 510
 Leu Asn Ser Leu Gly Ile Ser Glu Glu Leu Lys Glu Lys Leu Arg Asp
 515 520 525
 Val Met Val Asp Arg His Lys Val Ala Leu Gly Lys Thr Leu Gly Glu
 530 535 540
 Gly Glu Phe Gly Ala Val Met Glu Gly Gln Leu Asn Gln Asp Asp Ser
 545 550 555 560
 Ile Leu Lys Val Ala Val Lys Thr Met Lys Ile Ala Ile Cys Thr Arg
 565 570 575
 Ser Glu Leu Glu Asp Phe Leu Ser Glu Ala Val Cys Met Lys Glu Phe
 580 585 590
 Asp His Pro Asn Val Met Arg Leu Ile Gly Val Cys Phe Gln Gly Ser
 595 600 605
 Glu Arg Glu Ser Phe Pro Ala Pro Val Val Ile Leu Pro Phe Met Lys
 610 615 620

33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

His Gly Asp Leu His Ser Phe Leu Leu Tyr Ser Arg Leu Gly Asp Gln
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 Pro Val Tyr Leu Pro Thr Gln Met Leu Val Lys Phe Met Ala Asp Ile
 645 650 655
 Ala Ser Gly Met Glu Tyr Leu Ser Thr Lys Arg Phe Ile His Arg Asp
 660 665 670
 Leu Ala Ala Arg Asn Cys Met Leu Asn Glu Asn Met Ser Val Cys Val
 675 680 685
 Ala Asp Phe Gly Leu Ser Lys Lys Ile Tyr Asn Gly Asp Tyr Tyr Arg
 690 695 700
 Gln Gly Arg Ile Ala Lys Met Pro Val Lys Trp Ile Ala Ile Glu Ser
 705 710 715 720
 Leu Ala Asp Arg Val Tyr Thr Ser Lys Ser Asp Val Trp Ser Phe Gly
 725 730 735
 Val Thr Met Trp Glu Ile Ala Thr Arg Gly Gln Thr Pro Tyr Pro Gly
 740 745 750
 Val Glu Asn Ser Glu Ile Tyr Asp Tyr Leu Arg Gln Gly Asn Arg Leu
 755 760 765
 Lys Gln Pro Ala Asp Cys Leu Asp Gly Leu Tyr Ala Leu Met Ser Arg
 770 775 780
 Cys Trp Glu Leu Asn Pro Gln Asp Arg Pro Ser Phe Thr Glu Leu Arg
 785 790 795 800
 Glu Asp Leu Glu Asn Thr Leu Lys Ala Leu Pro Pro Ala Gln Glu Pro
 805 810 815
 Asp Glu Ile Leu Tyr Val Asn Met Asp Glu Gly Gly Gly Tyr Pro Glu
 820 825 830
 Pro Pro Gly Ala Ala Gly Gly Ala Asp Pro Pro Thr Gln Pro Asp Pro
 835 840 845
 Lys Asp Ser Cys Ser Cys Leu Thr Ala Ala Glu Val His Pro Ala Gly
 850 855 860
 Arg Tyr Val Leu Cys Pro Ser Thr Thr Pro Ser Pro Ala Gln Pro Ala
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 Asp Arg Gly Ser Pro Ala Ala Pro Gly Gln Glu Asp Gly Ala
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

<210> 34
 <211> 3608
 <212> DNA
 <213> Homo sapiens

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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<210> 35
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<212> PRT
<213> Homo sapiens

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<400> 35

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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Pro Leu Phe Pro Gly Pro Phe Pro Gly Ser Leu Gln Thr Asp His Thr
35      40      45

Pro Leu Leu Ser Leu Pro His Ala Ser Gly Tyr Gln Pro Ala Leu Met
50      55      60

Phe Ser Pro Thr Gln Pro Gly Arg Pro His Thr Gly Asn Val Ala Ile
65      70      75      80

Pro Gln Val Thr Ser Val Glu Ser Lys Pro Leu Pro Pro Leu Ala Phe
85      90      95

Lys His Thr Val Gly His Ile Ile Leu Ser Glu His Lys Gly Val Lys
100     105     110

Phe Asn Cys Ser Ile Asn Val Pro Asn Ile Tyr Gln Asp Thr Thr Ile
115     120     125

Ser Trp Trp Lys Asp Gly Lys Glu Leu Leu Gly Gly His His Arg Ile
130     135     140

Thr Gln Phe Tyr Pro Asp Asp Glu Val Thr Ala Ile Ile Ala Ser Phe
145     150     155     160

Ser Ile Thr Ser Val Gln Arg Ser Asp Asn Gly Ser Tyr Ile Cys Lys
165     170     175

Met Lys Ile Asn Asn Glu Glu Ile Val Ser Asp Pro Ile Tyr Ile Glu
180     185     190

Val Gln Gly Leu Pro His Phe Thr Lys Gln Pro Glu Ser Met Asn Val
195     200     205

Thr Arg Asn Thr Ala Phe Asn Leu Thr Cys Gln Ala Val Gly Pro Pro
210     215     220

Glu Pro Val Asn Ile Phe Trp Val Gln Asn Ser Ser Arg Val Asn Glu
225     230     235     240

Gln Pro Glu Lys Ser Pro Gly Val Leu Thr Val Pro Gly Leu Thr Glu
245     250     255

Met Ala Val Phe Ser Cys Glu Ala His Asn Asp Lys Gly Leu Thr Val
260     265     270

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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ser Gln Gly Val Gln Ile Asn Ile Lys Ala Ile Pro Ser Pro Pro Thr
      275                      280                      285

Glu Val Ser Ile Arg Asn Ser Thr Ala His Ser Ile Leu Ile Ser Trp
      290                      295                      300

Val Pro Gly Phe Asp Gly Tyr Ser Pro Phe Arg Asn Cys Ser Ile Gln
      305                      310                      315                      320

Val Lys Glu Ala Asp Pro Leu Gly Asn Gly Ser Val Met Ile Phe Asn
      325                      330                      335

Thr Ser Ala Leu Pro His Leu Tyr Gln Ile Lys Gln Leu Gln Ala Leu
      340                      345                      350

Ala Asn Tyr Ser Ile Gly Val Ser Cys Met Asn Glu Ile Gly Trp Ser
      355                      360                      365

Ala Val Ser Pro Trp Ile Leu Ala Ser Thr Thr Glu Gly Ala Pro Ser
      370                      375                      380

Val Ala Pro Leu Asn Val Thr Val Phe Leu Asn Glu Ser Ser Asp Asn
      385                      390                      395                      400

Val Asp Ile Arg Trp Met Lys Pro Pro Thr Lys Gln Gln Asp Gly Glu
      405                      410                      415

Leu Val Gly Tyr Arg Ile Ser His Val Trp Gln Ser Ala Gly Ile Ser
      420                      425                      430

Lys Glu Leu Leu Glu Glu Val Gly Gln Asn Gly Ser Arg Ala Arg Ile
      435                      440                      445

Ser Val Gln Val His Asn Ala Thr Cys Thr Val Arg Ile Ala Ala Val
      450                      455                      460

Thr Arg Gly Gly Val Gly Pro Phe Ser Asp Pro Val Lys Ile Phe Ile
      465                      470                      475                      480

Pro Ala His Gly Trp Val Asp Tyr Ala Pro Ser Ser Thr Pro Ala Pro
      485                      490                      495

Gly Asn Ala Asp Pro Val Leu Ile Ile Phe Gly Cys Phe Cys Gly Phe
      500                      505                      510

Ile Leu Ile Gly Leu Ile Leu Tyr Ile Ser Leu Ala Ile Arg Lys Arg
      515                      520                      525

Val Gln Glu Thr Lys Phe Gly Asn Ala Phe Thr Glu Glu Asp Ser Glu
      530                      535                      540

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

Leu Val Val Asn Tyr Ile Ala Lys Lys Ser Phe Cys Arg Arg Ala Ile
 545 550 555 560
 Glu Leu Thr Leu His Ser Leu Gly Val Ser Glu Glu Leu Gln Asn Lys
 565 570 575
 Leu Glu Asp Val Val Ile Asp Arg Asn Leu Leu Ile Leu Gly Lys Ile
 580 585 590
 Leu Gly Glu Gly Glu Phe Gly Ser Val Met Glu Gly Asn Leu Lys Gln
 595 600 605
 Glu Asp Gly Thr Ser Leu Lys Val Ala Val Lys Thr Met Lys Leu Asp
 610 615 620
 Asn Ser Ser His Arg Glu Ile Glu Glu Phe Leu Ser Glu Ala Ala Cys
 625 630 635 640
 Met Lys Asp Phe Ser His Pro Asn Val Ile Arg Leu Leu Gly Val Cys
 645 650 655
 Ile Glu Met Ser Ser Gln Gly Ile Pro Lys Pro Met Val Ile Leu Pro
 660 665 670
 Phe Met Lys Tyr Gly Asp Leu His Thr Tyr Leu Leu Tyr Ser Arg Leu
 675 680 685
 Glu Thr Gly Pro Lys His Ile Pro Leu Gln Thr Leu Leu Lys Phe Met
 690 695 700
 Val Asp Ile Ala Leu Gly Met Glu Tyr Leu Ser Asn Arg Asn Phe Leu
 705 710 715 720
 His Arg Asp Leu Ala Ala Arg Asn Cys Met Leu Arg Asp Asp Met Thr
 725 730 735
 Val Cys Val Ala Asp Phe Gly Leu Ser Lys Lys Ile Tyr Ser Gly Asp
 740 745 750
 Tyr Tyr Arg Gln Gly Arg Ile Ala Lys Met Pro Val Lys Trp Ile Ala
 755 760 765
 Ile Glu Ser Leu Ala Asp Arg Val Tyr Thr Ser Lys Ser Asp Val Trp
 770 775 780
 Ala Phe Gly Val Thr Met Trp Glu Ile Arg Thr Arg Gly Met Thr Pro
 785 790 795 800
 Tyr Pro Gly Val Gln Asn His Glu Met Tyr Asp Tyr Leu Leu His Gly
 805 810 815

33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

His Arg Leu Lys Gln Pro Glu Asp Cys Leu Asp Glu Leu Tyr Glu Ile
 820 825 830

Met Tyr Ser Cys Trp Arg Thr Asp Pro Leu Asp Arg Pro Thr Phe Ser
 835 840 845

Val Leu Arg Leu Gln Leu Glu Lys Leu Leu Glu Ser Leu Pro Asp Val
 850 855 860

Arg Asn Gln Ala Asp Val Ile Tyr Val Asn Thr Gln Leu Leu Glu Ser
 865 870 875 880

Ser Glu Gly Leu Ala Gln Gly Pro Thr Leu Ala Pro Leu Asp Leu Asn
 885 890 895

Ile Asp Pro Asp Ser Ile Ile Ala Ser Cys Thr Pro Arg Ala Ala Ile
 900 905 910

Ser Val Val Thr Ala Glu Val His Asp Ser Lys Pro His Glu Gly Arg
 915 920 925

Tyr Ile Leu Asn Gly Gly Ser Glu Glu Trp Glu Asp Leu Thr Ser Ala
 930 935 940

Pro Ser Ala Ala Val Thr Ala Glu Lys Asn Ser Val Leu Pro Gly Glu
 945 950 955 960

Arg Leu Val Arg Asn Gly Val Ser Trp Ser His Ser Ser Met Leu Pro
 965 970 975

Leu Gly Ser Ser Leu Pro Asp Glu Leu Leu Phe Ala Asp Asp Ser Ser
 980 985 990

Glu Gly Ser Glu Val Leu Met
 995